

Interactive SQL

The Interactive SQL function of the Natural Tools for DB2 enables you to execute SQL statements dynamically.

- Invoking the Interactive SQL Function
- SQL Input Members
- Data Output Members
- Processing SQL Statements
- PF-Key Settings
- Unloading Interactive SQL Results

Invoking the Interactive SQL Function



To invoke the Interactive SQL function

- Enter function code "I" on the Natural Tools for DB2 Main Menu.

The Interactive SQL screen is displayed:

```

16:21:04                ***** NATURAL TOOLS FOR DB2 *****                1999-09-30
                        - Interactive SQL -

                                Code      Function
                                ----      -
                                I         SQL Input Member
                                O         Data Output Member
                                ?         Help
                                .         Exit
                                ----      -
Code.. _      Library .. SAG_____
              Member ... _____

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
      Help           Exit                                           Canc

```

The following functions are available:

Code	Description
I	Displays SQL members in the interactive SQL input screen.
O	Displays output members in the interactive SQL output screen.

The following parameters can be specified:

Parameter	Description
Library	Specifies the name of the current Natural library which contains the specified input/output members. Specification of libraries whose names begin with "SYS" is not allowed. The library name is preset with your Natural user ID.
Member	If a valid member name is specified, the corresponding member is displayed. If a value is specified followed by an asterisk (*), all input/output members in the current library whose names begin with this value are listed. If asterisk notation is specified only, a selection list of all input/output members in the current library is displayed. If the Member field is left blank, the empty SQL input/output screen is displayed.

SQL Input Members

To invoke the SQL Input Member function enter function code "I" on the Interactive SQL screen. Depending on what member name you have specified, different screens are displayed.

SQL Input Screen

If you leave the Member field blank, the empty SQL input screen is invoked:

```

16:21:56          ***** NATURAL TOOLS FOR DB2 *****          1999-09-30
ISQL - Input      SAG          S 01- -----Columns 001 072
====>                               Scroll ==>  PAGE
***** ***** top of data *****
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
/ / / /
***** ***** bottom of data *****

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
      Help  Setup Exit  Exec  Rfind Rchan -      +      Outpu      Canc

```

The SQL input screen is a free-mode editor which provides a functionality similar to the one of the Software AG Editor. Using the editor you can enter or edit SQL statements via editor main and line commands. You can execute the SQL statements immediately from within the editor by pressing PF4 (Exec), or you can save them as an SQL member in a Natural library for later execution.

Note:

The PRINT command is not available in the SQL input screen.

Apart from the editor main and line commands, SQL code maintenance commands are also available to maintain SQL members in a Natural library. With these maintenance commands, input members can be listed, retrieved, saved in a Natural library, copied, and purged. They are entered in the command line of the input screen.

You can also obtain a list of the available maintenance commands by entering the help character "?" in the command line of the input screen. A window is displayed from which the desired command can be selected. The window can be scrolled forwards by pressing PF8, or backwards by pressing PF7.

```

10:57:06          ***** NATURAL TOOLS FOR DB2 *****          1999-09-30
ISQL - Input      SAG          S 01- -----Columns 001 072
====> ?          Scroll ==> PAGE
*****
*****
!
!   _ List <*,Member>
!   _ READ <Member>
!   _ SAVE <Member>
!   _ COPY <Member>
!   _ Purge <Member>
!   _ LIBrary <Library>
!   _ SElect <TB,CO> name1 name2
!
+-----+
*****
***** bottom of data *****
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
      Help Setup Exit Exec Rfind Rchan - + Outpu Canc

```

To assist you in coding your SQL member, existing DB2 tables and columns can be listed using the SELECT command. From the list, you can include table and column names into the editor.

The SELECT command is available for table and column selection:

Command	Description
<u>SELECT TABLE</u> [creator.]name	Selects all tables with the specified creator (optional) and name. For both <i>creator</i> and <i>name</i> , you can specify a value followed by an asterisk (*), and all tables whose names begin with this value are selected. If you specify asterisk notation only, all existing tables are selected. If you specify a table name without a creator, all tables with the specified name are selected, regardless of their creator.
<u>SELECT COLUMN</u> creator.name	Selects all columns of the table " <i>creator.name</i> ". Since the table must be uniquely identified, asterisk notation cannot be used.

Sample Input Screen with Table Listing Window

```

11:02:50          ***** NATURAL Tools F +-----+
ISQL - Input      SAG                      S !   Tab:                               !
====>                                !   SYSIBM.*                               !
***** ***** top of !   Table Name             Creator !
                                !   _ SYSPLANAUTH        SYSIBM !
                                !   _ SYSPLANDEP        SYSIBM !
                                !   _ SYSRELS          SYSIBM !
                                !   _ SYSRESAUTH       SYSIBM !
                                !   _ SYSSTMT          SYSIBM !
                                !   _ SYSSTOGROUP      SYSIBM !
                                !   _ SYSSYNONYMS      SYSIBM !
                                !   _ SYSTABAUTH       SYSIBM !
                                !   _ SYSTABLEPART     SYSIBM !
                                !   _ SYSTABLES        SYSIBM !
                                !   _ SYSTABLESPACE    SYSIBM !
                                !   _ SYSUSEROUT       SYSIBM !
                                !   _ SYSUSERNAMES     SYSIBM !
                                !   _ SYSVUIEWDEP      SYSIBM !
                                !   _ SYSVIEWS          SYSIBM !
                                !   _ SYSVLTREE         SYSIBM !
***** ***** bottom o !   _ SYSVOLUMES        SYSIBM !
                                !   _ SYSVTREE         SYSIBM !
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF !
      Help  Setup Exit  Exec  Rfind Rchan  - +-----+

```

From the table list, you can select a table for display of its columns by marking it with "C" in front of the table name. The columns of a table are listed together with their type and length.

Sample Input Screen with Column Listing Window

```

11:02:50          ***** NATURAL +-----+
ISQL - Input      SAG          ! Tab: SYSIBM.SYSTABLES          !
====>            !          !
*****           !          !
A      SELECT      ! M NAME          VARCHAR 18      !
00002 FROM SYSIBM.SYSTABLES; ! M CREATOR        CHAR    8      !
*****           ! M TYPE          CHAR    1      !
                        ! M DBNAME         CHAR    8      !
                        ! M TSNAME         CHAR    8      !
                        ! _ DBID          SMALLINT 2      !
                        ! _ OBID          SMALLINT 2      !
                        ! _ COLCOUNT     SMALLINT 2      !
                        ! _ EDPROC         CHAR    8      !
                        ! _ VALPROC        CHAR    8      !
                        ! _ CLUSTERTYPE     CHAR    1      !
                        ! _ CLUSTERRID     INTEGER 4      !
                        ! _ CARD           INTEGER 4      !
                        ! _ NPAGES         INTEGER 4      !
                        ! _ PCTPAGES      SMALLINT 2      !
                        ! _ IBMREQD       CHAR    1      !
                        ! _ REMARKS       VARCHAR 254      !
                        ! _ PARENTS       SMALLINT 2      !
Enter-PF1---PF2---PF3---PF4---PF5---PF6 !          !
      Help  Setup Exit  Exec  Rfind Rch +-----+

```

If you want to copy table or column names from a selection list into the editor, mark the corresponding table or column with "M" as shown on the previous screen. The table or column names are copied either after or before the line marked with "A" or "B" respectively, or to the top of the displayed data.

Sample Input Screen with Copied Column Names

```

11:02:50          ***** NATURAL +-----+
ISQL - Input      SAG          !  Tab: SYSIBM.SYSTABLES          !
====>            !
*****           !      Column Name          Type          Len          !
A      SELECT          !  _ NAME          VARCHAR      18          !
00002  NAME            !  _ CREATOR       CHAR          8          !
00003  , CREATOR       !  _ TYPE          CHAR          1          !
00004  , TYPE          !  _ DBNAME        CHAR          8          !
00005  , DBNAME        !  _ TSNAME        CHAR          8          !
00006  , TSNAME        !  _ DBID          SMALLINT      2          !
00007  FROM SYSIBM.SYSTABLES; !  _ OBID          SMALLINT      2          !
*****           !  _ COLCOUNT     SMALLINT      2          !
                                           !  _ EDPROC        CHAR          8          !
                                           !  _ VALPROC       CHAR          8          !
                                           !  _ CLUSTERTYPE   CHAR          1          !
                                           !  _ CLUSTERRID    INTEGER       4          !
                                           !  _ CARD          INTEGER       4          !
                                           !  _ NPAGES        INTEGER       4          !
                                           !  _ PCTPAGES      SMALLINT      2          !
                                           !  _ IBMREQD       CHAR          1          !
                                           !  _ REMARKS       VARCHAR      254          !
                                           !  _ PARENTS       SMALLINT      2          !

Enter-PF1---PF2---PF3---PF4---PF5---PF6 !
      Help  Setup Exit  Exec  Rfind Rch +-----+

```

Fixed Mode with Interactive SQL

All fixed-mode input screens from the Catalog Maintenance part of the Natural Tools for DB2 are available as help maps within the Interactive SQL part. To invoke this help facility, enter the name of the SQL statement you want to create in the command line of your SQL input screen, for example, "CREATE TABLE" or "CR TB" for the CREATE TABLE command.

The same command abbreviations apply as with the Catalog Maintenance.

If you enter "CREATE TABLE" or "CR TB", the Create Table screen is invoked:

```

16:08:09          ***** NATURAL TOOLS FOR DB2 *****          1999-09-30
                        - Create Table -                          1 / 8

>>--- CREATE TABLE ----- SAG_____ . DEMOTABLE_____>
                        <creator.>table-name
>+----- LIKE ----- _____ . _____>+
!                                <creator.>table/view-name                                !
+ ( COL1_____ - CHAR_____ ( 20___ ) - _ - _ -- _ - _ - _ , - +
+- COL2_____ - INTEGER_____ ( _____ ) - _ - _ x -- _ - _ 2 - _ , - +
+- COL3_____ - SMALLINT_____ ( _____ ) - _ - _ x -- _ - _ 1 - _ , - +
+- COL4_____ - CHAR_____ ( 2___ ) - S - _ -- _ - _ - _ - _ , - +
+- COL5_____ - VARCHAR_____ ( 30___ ) - _ - _ x -- _ - _ 3 - _ , - +
+- COL6_____ - DECIMAL_____ ( 2,5___ ) - _ - _ -- X - _ - _ - _ , - +
+- COL7_____ - FLOAT_____ ( _____ ) - _ - _ x -- _ - _ - _ - _ , - +
+- COL8_____ - DATE_____ ( _____ ) - _ - _ -- _ - _ - _ - _ , - +
+- COL9_____ - TIME_____ ( _____ ) - _ - _ -- _ - _ - _ - _ , - +
+- _____ - _____ ( _____ ) - _ - _ -- _ - _ - _ - _ , - +
      column-name          format          length      S  NN  fld  PR-  R
                                   M  ND  proc KEY  C
                                   B              UK  D

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
      Help  Error Exit  Incl  IBack --      +      ++              Next  Canc

```

If you have entered data for a complete SQL statement, you can generate an SQL statement from the entered data and include it into the SQL input screen. Using PF4 (Incl), you include the generated SQL code and remain on the Create Table screen. Using PF5 (IBack), you include the generated SQL code and return to the SQL input screen.

Retrieve an SQL Member

If you specify a unique member name in the Member field of the Interactive SQL screen, the corresponding SQL member is listed on the input screen. If no member exists with the specified name, a corresponding message is returned.

Sample SQL Member Listed in Input Screen

```

16:27:12          ***** NATURAL TOOLS FOR DB2 *****          1999-09-30
ISQL - Input      SAG(TESTSEQ)          S 01- -----Columns 001 072
====>                               Scroll ==>  PAGE
***** ***** top of data *****
00001 CREATE TABLE DEMOTABLE
00002   (COL1              CHAR(8) ,
00003    COL2              INTEGER
00004   ) IN DATABASE DEMO;
00005 INSERT INTO DEMOTABLE
00006   VALUES ( 'AAAAA',1);
00007 * INSERT INTO DEMOTABLE
00008 *   VALUES ( 'BBBBB',2);
00009 SELECT FROM DEMOTABLE;
00010 DROP TABLE DEMOTABLE;
***** ***** bottom of data *****

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Setup Exit  Exec  Rfind Rchan -      +      Outpu      Canc

```

Listed SQL members can be purged, modified, executed, or saved.

An asterisk (*) in front of a statement line turns this line into a comment line, which means that the corresponding SQL code is not considered for execution.

List of SQL Members

If you specify a value followed by an asterisk in the Member field, a list of all SQL input members in the current library whose names begin with this value is displayed.

If you specify asterisk notation only, a list of all SQL input members in the current library is displayed.

Sample SQL Input Member Selection List

16:24:02		***** NATURAL TOOLS FOR DB2 *****			1999-09-30	
- Select Member -						
Mark	Member	Type	User	Date	Time	
----	-----	-----	-----	-----	-----	
_	AAAA	SQL	SAG	1997-01-18	13:54:54	
_	ADEVIEW	SQL	SAG	1997-09-23	14:01:09	
_	AIRCRAFT	SQL	SAG	1997-11-28	10:01:32	
_	BBBB	SQL	SAG	1997-01-18	15:25:14	
_	BSP1	SQL	SAG	1997-01-18	14:57:11	
_	BSP2	SQL	SAG	1997-01-18	14:58:03	
_	CCCC	SQL	SAG	1997-01-18	15:29:18	
_	CREATE1	SQL	SAG	1997-01-03	10:21:48	
_	CRETAA	SQL	SAG	1997-09-29	14:34:15	
_	CRETAB	SQL	SAG	1997-09-29	14:33:42	
_	CRETAB01	SQL	SAG	1997-09-29	15:19:02	
_	CRE0001	SQL	SAG	1997-09-29	16:52:31	
_	CRE00011	SQL	SAG	1997-09-29	16:56:45	
_	CRE003	SQL	SAG	1997-04-26	13:28:28	
_	CRE004	SQL	SAG	1997-04-26	13:28:37	
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---						
Help		Exit				

From the input screen selection list, SQL members can be selected for display by marking them with an "S". If the list has been invoked by a PURGE command, members can be purged by marking them with a "P".

Data Output Members

To invoke the Data Output Member function, enter function code "O" on the Interactive SQL screen. Depending on what member name you have specified, different screens are displayed.

The Data Output Screen

If you leave Member field blank, the empty SQL output screen is invoked.

```

16:29:35          ***** NATURAL TOOLS FOR DB2 *****          1999-09-30
ISQL - Output      SAG                      S 02- -----Columns 001 072
====>                                     Scroll ==> PAGE
***** ***** top of data *****
***** ***** bottom of data *****

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit      Rfind Rchan -      +      <      >      Canc

```

From the data output screen you have access to output data members only. Output members consist of data retrieved from the database as a result of executed SQL statements. These data can be browsed and saved for later use as output members on the Natural system file (FUSER). In addition to the data retrieved from the database, output members also contain DB2 status information, and the executed SQL member.

If you execute an SQL statement, the results are automatically shown on the output screen. Thus, you can enter the interactive SQL output screen also by executing an SQL statement from the input screen. From the output screen you can return to the input screen by pressing PF3 (Exit).

The maintenance commands available for output members can be displayed and selected in a window, too. The window is invoked by entering the help character "?" in the command line of the output screen.

```

10:57:59          ***** NATURAL TOOLS FOR DB2 *****          1999-09-30
ISQL - Output      SAG          S 02- -----Columns 001 072
====> ?          Scroll ====> PAGE
***** ***** +-----+*****
***** ***** !*****
                !  _ List <*,Member>          !
                !  _ READ <Member>            !
                !  _ SAvE <Member>            !
                !  _ Purge <Member>           !
                !  _ LIBrary <Library>         !
                !                               !
                +-----+
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11--PF12---
      Help      Exit      Rfind Rchan -      +      <      >      Canc

```

Apart from the maintenance commands, only browse commands are available, since output members cannot be modified. Both browse and maintenance commands are entered in the command line of the output screen.

If an output member is too large to fit on your terminal screen, you can use the `FIX ON n` command to keep the first *n* characters on the screen when scrolling to the left or to the right.

Retrieve an Output Member

If you specify a unique member name in the Member field of the Interactive SQL screen, the corresponding output member is listed on the output screen. If no member exists with the specified name, a corresponding message is returned.

Sample Output Member Listed in Output Screen

```

16:27:12          ***** NATURAL TOOLS FOR DB2 *****          1999-09-30
ISQL - Output      SAG(TESTSEQO)          S 02- -----Columns 001 072
====>                                     Scroll ==> PAGE
***** ***** top of data *****
00001 CREATE TABLE DEMOTABLE
00002   (COL1              CHAR(8),
00003    COL2              INTEGER
00004   ) IN DATABASE DEMO
00005 -----
00006 STATEMENT WAS SUCCESSFUL, SQLCODE = 0
00007 -----
00008 INSERT INTO DEMOTABLE
00009   VALUES ( 'AAAAA',1)
00010 -----
00011 STATEMENT WAS SUCCESSFUL, SQLCODE = 0
00012 -----
00013 SELECT FROM DEMOTABLE
00014 -----
00015 COL1              COL2
00016 -----
00017 AAAAA              1

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help          Exit          Rfind Rchan -      +      <      >      Canc

```

List of Output Members

If you specify a value followed by an asterisk (*) in the Member field of the Interactive SQL screen, a list of all data output members in the current library whose names begin with this value is displayed.

If you specify asterisk notation only, a list of all data output members in the current library is displayed.

Sample Data Output Member Selection List

16:24:02		***** NATURAL TOOLS FOR DB2 *****			1999-09-30
Select Member					
Mark	Member	Type	User	Date	Time
----	-----	-----	-----	-----	-----
—	AAAA	SQL-RESULT	SAG	1997-01-18	13:54:54
—	ADEMVVIEW	SQL-RESULT	SAG	1997-10-23	14:01:09
—	AIRCRAFT	SQL-RESULT	SAG	1997-11-28	10:01:32
—	BBBB	SQL-RESULT	SAG	1997-01-18	15:25:14
—	BSP1	SQL-RESULT	SAG	1997-01-18	14:57:11

From the output member selection list, output members can be selected for display by marking them with an "S". If the list has been invoked by a PURGE command, members can be purged by marking them with a "P".

Processing SQL Statements

SQL input members can only be accessed from the input screen. They are executed from the input screen against DB2 by pressing PF4 (Exec). After execution, the data output screen appears which contains the results of the executed SQL member.

If an SQL member consists of more than one SQL statements, the individual statements must be separated by a semicolon. They can be executed one by one or all together at the same time. To choose the form of execution, a window is provided which can be invoked by pressing PF2 (Setup).

```

16:27:12          ***** NATURAL TOOLS FOR DB2 *****          1999-09-30
ISQL - Input      SAG(TESTSEQ)          S 01- -----Columns 001 072
====>
*****
00001 CREATE TABLE DEMOTABLE          ! _ Execute statements one by one          !
00002 (COL1          CHAR(8          ! X Execute all statements together          !
00003 COL2          INTEGE          !          !
00004 ) IN DATABASE DEMO;          ! _ Optional Commit/Rollback          !
00005 INSERT INTO DEMOTABLE          ! X Automatic Commit/Rollback          !
00006 VALUES ('AAAAA',1);          !          !
00007 * INSERT INTO DEMOTABLE          ! _ Ignore positive SQL codes          !
00008 * VALUES ('BBBBB',2);          !          !
00009 SELECT FROM DEMOTABLE;          ! Text for NULL values          : <NULL>__          !
00010 DROP TABLE DEMOTABLE;          !          !
*****
***** b          ! Maximum length of columns :          !
          ! Maximum number of rows          :          !
          ! DB2 cost limit          :          !
          !          !
          ! Header Line every 15__ Data Lines          !
          ! Record Length Data Session: _250          !
          !          !
Enter-PF1---PF2---PF3---PF4---PF5---PF+-----
          Help Setup Exit Exec Rfind Rchan -          +          Outpu          Canc

```

Below is information on the options provided:

- Execute Statements One By One
- Execute All Statements Together
- Automatic Commit/Rollback
- Optional Commit/Rollback
- Text For NULL Values
- Maximum Length of Columns
- Maximum Number of Rows
- DB2 Cost Limit
- Header Line Every n Data Lines
- Record Length Data Session

Execute Statements One By One

After each SQL statement the output screen is shown. From the output screen, you can either execute the next SQL statement from the input screen by pressing PF4 (Next), or skip the remaining SQL statements and return to the input screen immediately by pressing PF3 (Exit).

Execute All Statements Together

All statements are executed immediately one after the other. The output screen shows the results of all statements together.

Statements containing cursor names, host variables, or parameter markers cannot be executed with interactive SQL. Also not executed are statements available as embedded SQL only; that is, statements whose functions are automatically performed by Natural.

These statements are:

CLOSE
CONNECT
DECLARE
DELETE WHERE CURRENT OF CURSOR
DESCRIBE
EXECUTE
FETCH
INCLUDE
OPEN
PREPARE
SELECT INTO
SET <i>host-variable</i>
SET CURRENT PACKAGESET
UPDATE WHERE CURRENT OF CURSOR
WHenever

Automatic Commit/Rollback

If you select automatic commit/rollback, each modification of the database is automatically either committed or rolled back, depending on whether all the SQL statements involved execute successfully. If so, an SQL COMMIT WORK command is executed; if not, an SQL ROLLBACK command backs out all database modifications since the last commit point.

Optional Commit/Rollback

If you select optional commit/rollback, a window is invoked after each SQL statement, offering you the option to either commit or roll back the resulting database modifications shown on the screen.

Note:

Since under CICS and IMS/TM each terminal I/O results in a SYNCPOINT, the optional commit/rollback feature only applies in a TSO environment.

In all environments, you can include SQL COMMIT and ROLLBACK commands in your input member, too. Under CICS and IMS/TM, however, these commands are translated into the corresponding TP-monitor calls.

Text For NULL Values

The text that is to be shown for NULL values can be specified here; the default string is '---'.

Maximum Length of Columns

Limits the length for a single column to n characters. This limit only applies to character data. DATE, TIME, or NUMERIC columns are not truncated. The value 0 indicates that no limit exists.

Maximum Number of Rows

Limits the number of rows returned by one SELECT statement. The value 0 indicates that no limit exists.

DB2 Cost Limit

Sets a limit for the DB2 cost estimate. SELECT statements which exceed this limit are not executed. The value 0 indicates that no limit exists.

Header Line Every n Data Lines

For SELECT statements, you can specify that every n data lines a header line is inserted with the names of the selected columns. If n is set to 0, only one header line is displayed at the top of the data.

Record Length Data Session

The record length (n) for the output session can be specified. If the specified record length is smaller than the record length of the output data, the output records are truncated accordingly. The truncation of records is indicated by a "greater than" character (>) as the leftmost character in the first line beneath each header line. The default value for " n " is 250 bytes.

PF-Key Settings

The following PF-key settings apply to the input screen:

Key	Setting	Function
PF2	Setup	Invokes a window with further processing options.
PF4	Exec	Executes the SQL member currently in the input screen.
PF5	Rfind	Repeats the last executed FIND command.
PF6	Rchan	Repeats the last executed CHANGE command.
PF7	-	Scrolls the display one page backward.
PF8	+	Scrolls the display one page forward.
PF9	Output	Invokes the output member selection list directly from within the input screen.

Apart from PF2 (Setup), PF4 (Exec), and PF9 (Output), the same PF-key settings apply to the output screen, too. In addition, the following PF-key settings are available:

Key	Setting	Function
PF4	Next	Executes the next SQL statement if an SQL member consists of more than one statement, and if you have chosen to execute them one after the other. If not, the setting for PF4 is left blank.
PF10	<	Scrolls the display of the output screen to the left.
PF11	>	Scrolls the display of the output screen to the right.

Unloading Interactive SQL Results

Results from interactive SQL are unloaded and written to a dataset referred to by DD name CMWK01 in batch mode using the UNLDDATA command.

CMWK01 should be of variable record format; the record length depends on the size of the SQL output member and can range from 250 to 4000 bytes.

If UNLDDATA is issued in library SYSDB2, the Unload SQL Results menu is displayed:

16:53:20	***** NATURAL TOOLS FOR DB2 *****	1999-09-30									
- Unload SQL Results -											
<table border="0"> <tr> <td></td> <td>Code</td> <td>Function</td> </tr> <tr> <td></td> <td>U</td> <td>Unload SQL Results</td> </tr> <tr> <td></td> <td>.</td> <td>Exit</td> </tr> </table>				Code	Function		U	Unload SQL Results		.	Exit
	Code	Function									
	U	Unload SQL Results									
	.	Exit									

Code .. _	Library ..	_____									
	Member ...	_____									
<p>Command ==></p> <p>Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---</p> <p>Exit</p>											
		Canc									

The following function is available:

Code	Description
U	Unloads results from interactive SQL execution.

The following parameters apply:

Parameter	Description
Library	Specifies the name of the Natural library from which the specified output members are to be unloaded. You cannot specify libraries whose names begin with "SYS". This parameter must be specified.
Member	Specifies the name(s) of the output member(s) to be unloaded. This parameter must be specified.